PLANNING, AIR QUALITY AND ENVIRONMENT



FY07 Planning, Air Quality and Environment "Menu" Technical Assistance, Training and Peer Review Offerings

To provide FHWA Divisions and partner agencies with a comprehensive listing of planning technical assistance and training offerings, this "menu" was developed. In fiscal year (FY) 06, the "menu" was broadened to include planning, air quality and environment. Essentially, this is a "menu of options" organized by subject area that are available from offices throughout FHWA as well as the National Highway Institute (NHI) and the National Transit Institute (NTI).

The menu provides a brief overview of the training and technical assistance workshops, courses and seminars that are available in different planning specialty areas and for air quality and environment. These offerings may be coordinated or delivered through different FHWA units, but the "menu" below attempts to provide an overall summary of what is currently available, with the goal of enhancing awareness of these resources and supporting performance planning. In addition to the offerings listed below, please note that on-going, general technical assistance will continue to be provided to FHWA Division Offices and partner agencies as requested.

For each offering listed below, a brief description is provided along with its length, availability and a point of reference for further information. In considering the courses/workshops that may be of interest, please note that NHI/NTI courses will often offer a comprehensive overview of a particular topic. Workshops (often offered through the Resource Center) are often shorter in length, and depending on the topic can provide either a more summary view of a subject or a more in-depth discussion of an element of a broader NHI/NTI course. In many cases, these workshops can also be tailored to the needs/issues of a specific state or MPO. Workshop offerings may also include facilitated discussions on particular topics and development of action plans.

* The FHWA Virtual Freight Team (VFT) is comprised of representatives from the Resource Center's Technical Service Teams of Planning, Operations, Air Quality, Safety, Environment, and Finance and is focused on developing and delivering training and technical assistance on freight. VFT initiatives are worked in partnership with the Office of Freight Management and Operations and Office of Planning.

FHWA Points of Contact by Office

Resource Center Planning Team Lisa Randall (720) 963-3209

Resource Center Air Quality Team **Bob O'Loughlin** (415) 744-3823

Resource Center Environment Team **Don Cote** (720) 963-3210

HEPP, Transportation Planning Capacity Building Program (TPCB): Robert Ritter (202) 493-2139

HEPP, Planning Oversight and Stewardship Team Larry D. Anderson (202) 366-2374

HEPI, Border Planning and GIS Roger Petzold (202) 366-4074

HEPI, TMIP and Travel Demand Forecasting **Brian Gardner** (202) 366-4061

HEPE, Environmental Training Lamar Smith (202) 366-8994 & Aung Gye (202) 366-2167

HEPN, Transportation Conformity & Air Quality Cecilia Ho (202) 366-9862 & Mike Savonis (202) 366-2080

FHWA Virtual Freight Team * Lisa Randall (720) 963-3209

FHWA Freight Professional Development Carol Keenan (202) 366-6993

HOFM, Commercial Vehicle Size and Weight Julie Strawhorn (202) 366-4415 & Bill Mahorney (202) 366-6817

HPPI, Policy Information **David Winter** (202) 366-0175

HOP, Planning and Operations Wayne Berman (202) 366-2199

Training and Technical Assistance Offerings

Air Quality

- Implications of Air Quality Planning for Transportation
- The CMAQ Program: Purpose And Practice
- Estimating Regional Mobile Source Emissions
- Introduction to Transportation/Air Quality Conformity
- Mobile Source Air Toxics Course
- Specialized Air Quality Workshops/Seminars

Border Planning

Border Planning and Border Wizard Technical Assistance

Community Impact Assessment

- Community Impact Assessment Courses
- Community Impact Assessment Seminar
- Community Impact Assessment Workshops

Congestion Management Process

- Congestion Management Process Workshop
- Congestion Management Process Technical Assistance

- Section 7 Basic Endangered Species Act
- Section 7 Advanced—Interagency Coordination
- Section 106 Historic Preservation Workshop
- Section 10/404 Clean Water Act
- American Indian Best Practices
- Beyond Compliance: Historic Preservation in Transportation Project Development
- Biological Assessments
- Context Sensitive Solutions Course
- Context Sensitive Solutions Workshop
- Design and Implementation of Erosion and Sediment Control
- Functional Assessment of Wetlands Course
- Fundamentals and Abatement of Highway Traffic Noise
- Highway Traffic Noise Workshop
- Indirect and Cumulative Effects Analysis Workshop
- National Environmental Policy Act (NEPA) Executive Briefing
- NEPA and Transportation Decisionmaking
- Soil Erosion/Sediment Control
- Wetland Delineation

Environmental Justice

- Fundamentals of Environmental Justice
- Environmental Justice for MPOs Seminar
- Environmental Justice and Project Development
- EJ/Title VI Technical Assistance

Data Collection, Reporting and Applications

- Census Transportation Planning Package Workshop
- Driver's License and Motor Vehicle Registration Workshop
- Development and Implementation of Travel Surveys
- National Household Travel Survey (NHTS) Technical Assistance
- Planning Data Technical Assistance
- Federal-aid Financing—Highway Information and Apportionment Factors, Understanding Your State's Fair Share
- Financial Analysis System Highways (FASH) Workshop
- Highway Information Seminar
- HPMS Workshop
- HPMS Software Workshop
- HPMS Understanding its Purpose and Place
- Motor Fuel Workshop
- Traffic Data for HPMS Reporting
- Traffic Monitoring Guide Training Course
- Traffic Monitoring: An Introduction
- VTRIS and TVT Data, Understanding and Using

Financial Planning / Fiscal Constraint

- Financial Planning in Transportation
- Highway Program Financing
- Specialized Innovative Finance Workshops/Seminars

Freight Planning

- Engaging the Private Sector in Freight Planning
- Engaging the Private Sector in Freight Planning, Exec Summary
- Freight Planning Technical Assistance
- Freight Security Awareness Web-Based Primer
- Integrating Freight in the Transportation Planning
- Integrating Freight in the Transportation Planning Process, Exec Summary
- Transportation Planning for the Private Sector Presentation
- Uses of Multimodal Freight Forecasting in Transportation Planning
- Upcoming New Freight Courses/Workshops and Technical Assistance Offerings

Environment

Section 4(f) Workshop

GIS and Planning / GIS and Environment

Applying Spatial Data Technologies to Transportation

- GIS and Transportation Planning Technical Assistance
- Transportation Planning Applications of Google Earth
- Use of GIS within Environmental Streamlining & Stewardship

Land Use and Transportation

- Forecasting Land Use Activity Seminar
- Land Use and Transportation Course
- Land Use and Transportation Planning Seminar
- Land Use and Transportation Planning Technical Assistance

Linking Planning and NEPA

- Linking Planning and NEPA Executive Seminar
- Linking Planning and NEPA Managers Workshop
- Linking Planning and NEPA Seminar

Performance Measures

 Performance Measures for Transportation Planning Technical Assistance

Planning Fundamentals

- Administration of FHWA Planning Grants
- Metropolitan Transportation Planning
- Metropolitan Planning 101 Seminar
- Introduction to Statewide Planning
- Statewide and Metropolitan Programming
- Overview of Metropolitan Planning for MPO Board Members
- General Planning Technical Assistance

Planning and Operations

- Executive Session on Advancing Regional Transportation Systems Management and Operations
- Advancing Regional Transportation Systems Management and Operations
- Regional ITS Architecture: Planning Perspective
- ITS Deployment Analysis System Course

Planning Oversight and Stewardship

Planning Oversight and Stewardship Program Assistance

Public Involvement

- Public Involvement in Transportation Decision-Making
- Public Involvement Course

Scenario Planning

- Scenario Planning Technical Assistance
- Scenario Planning Workshop

Transportation Safety Planning

- Transportation Safety Planning
- Safety Conscious/Transportation Safety Planning Forums
- Safety Conscious/Transportation Safety Planning Seminar
- Safety Conscious /Transportation Safety Planning Technical Assistance

Travel Demand Forecasting

- Introduction to Urban Travel Demand Forecasting
- Multimodal Travel Forecasting
- Travel Demand Forecasting Seminar
- Model Validation and Reasonableness Checking Seminar
- Uses of Multimodal Freight Forecasting in Transportation Planning
- Travel Demand Forecasting Technical Assistance
- Statewide Travel Forecasting Workshop

Tribal Transportation Planning and Historic Preservation

 Tribal Transportation Planning and Historic Preservation Technical Assistance

Peer Exchanges

Exchanges

- Freight Peer-to-Peer Program
- HPMS and Highway Inventory Data Peer to Peer Program
- Transportation Planning Capacity Building Peer Program
- Travel Model Improvement Program (TMIP) Peer Reviews and TMIP Technical Roundtables

Air Quality

Implications of Air Quality Planning for Transportation (NHI 142044) Description: This NHI course explains how the integrated transportation and air quality planning process has been defined and reinforced over the past decade by regulations, guidance, and litigation. It provides a context for the various statutory and regulatory requirements, including a comprehensive review of the 1990 CAAA requirements, EPA policies related to transportation, and the process of developing (SIPs). Length: 3 days. Available: Now. For more Information, go to www.nhi.fhwa.dot.gov.

CMAQ Program: Purpose And Practice (NHI 142043)

Description: This NHI course explains the underlying principles and eligibility requirements of the Congestion Mitigation and Air Quality (CMAQ) program and provides an overview of project evaluation and selection practices. Length: 2 days. Available: Now. For more Information, go to www.nhi.fhwa.dot.gov.

Estimating Regional Mobile Source Emissions (NHI 152071A) Description: This NHI course provides an overview of travel demand forecasting models, emission factor models and travel related data requirements, travel model and emission factor model interactions and assessing transportation control measure (TCM) effectiveness and impacts on emissions. Length: 3.5 days. Available: Now. For more Information, go to www.nhi.fhwa.dot.gov and mip.fhwa.dot.gov.

Introduction to Transportation/Air Quality Conformity (NTI) Description: Provides basic information about conformity requirements and the relationship of the transportation and air quality planning processes. Also highlights the roles and responsibilities in inter-agency coordination on air quality issues. Length: 3 days. Available: Now. For more Information, go to www.ntilonline.com.

Mobile Source Air Toxics Course Description: This course is for practioners and managers who will be responsible for analyzing and modeling the mobile source air toxic impacts of transportation projects in the NEPA process. Length: 2 days. Available: Now. For more Information, contact Robert.O'Loughlin@fhwa.dot.gov.

Specialized Air Quality Workshops/Seminars

Description: Several workshops and seminars, of varying lengths, are available from the Resource Center's Air Quality Team, including Air Quality Analysis, Highway Traffic Noise Analysis, Introduction to Emission Factor and Micro-Scale Dispersion Modeling, Mobile Source Emissions Factor Modeling, Pollution Modeling, Pollution Dispersion Models and Transportation Air Quality Dispersion Modeling

and Transportation Conformity 101. Length: Varies. Available: Now. For more Information, contact Resource Center Air Quality team.

Border Planning

Border Planning and Border Wizard Technical Assistance Description: Tailored to customer requirements (length and topics), Resource Center specialists provide technical assistance on Border Wizard, modeling software for use at border operational facilities and for potential planning

border operational facilities and for potential planning applications. Length: Depends on customer needs. Available: Now. For more Information, contact supin.yoder@fhwa.dot.gov.

Community Impact Assessment

Community Impact Assessment Course Description: A how-to companion to FHWA's "Community Impact Assessment: A Quick Reference for Transportation" (the CIA small purple book). It will use everyday projects as examples and include an extensive reference of resources. Length: 2.5 days. Available: Now. For more information, contact HEP-TPCB Program.

Community Impact Assessment Seminar (RC) Description: Provides an overview of CIA, as an iterative process focusing on understanding the potential impacts of proposed transportation activities on affected communities and populations. Assessments focus on socio-economic and cultural impacts. Length: 2 days. Available: Now. For more information, contact klynn.berry@fhwa.dot.gov.

Community Impact Assessment Workshops Description: FHWA supports periodic regional or national CIA workshops that focus on regional CIA issues and "how to" as opposed to CIA policy. These workshops are open to anyone but will be heavily attended by host-State staff, MPO's, resource agencies, and consultants. Length: Tailored. Available: Now. For more information, contact HEP-TPCB Program or brenda.kragh@fhwa.dot.gov.

Congestion Management Process

Congestion Management Process Workshop

Description: Tailored to audience requirements (length and topics), provides an overview of the requirements and components of a Congestion Management Process, including the development of performance measures, identifying alternative solutions to manage congestion, prioritizing funding strategies, and highlighting noteworthy practices. Length: 1.5-2 days. Available: Now. For more

Information, contact <u>ben.williams@fhwa.dot.gov</u> or <u>brian.betlyon@fwha.dot.gov</u>.

Congestion Management Process Technical Assistance

Description: Tailored to customer requirements (length and topics), Resource Center specialists provide technical assistance and reviews on arrange of Congestion Management Process topics and issues. Length: Depends on customer needs. Available: Now. For more Information, contact ben.williams@fhwa.dot.gov or brian.betlyon@fwha.dot.gov.

Data Collection, Reporting and Applications

Census Transportation Planning Package Workshop

Description: Tailored to audience requirements (length and topics), provides an overview of the Census Transportation Planning Package (CTPP) 2000, its special tabulations from the decennial census survey, and its uses and applications for transportation planning. Length: 2 hours to 2 days. Available: Now. For more information, contact ed.christopher@fhwa.dot.gov or elaine.murakami@fhaw.dot.gov.

Driver's License and Motor Vehicle Registration Workshop

Description: Tailored to Federal, State and local finance data providers and users to describe the fundamentals for collecting, processing and using these data sets for the Federal-aid program. With increasing emphasis on data quality, proper review techniques and best practices, will be presented. Length: 1 day. Available: To be announced. For more information, contact Gloria. Williams@fhwa.dot.gov.

Development and Implementation of Travel Surveys (NHI 151034) Description: Provides an overview of the development and implementation of the most common types of travel surveys, including: household travel and activity, vehicle intercept, transit on-board, commercial vehicle, work place and establishment, special generator, hotel/visitor, and parking surveys. Length: 3 days. Available: Course under Revision. No Target Date. For more information, go to www.nhi.fhwa.dot.gov.

National Household Travel Survey (NHTS) Technical Assistance Description: On-going training, technical assistance and user support is offered for the NHTS data. Training includes a tutorial on how to use the on-line analysis engine at http://nhts.ornl.gov to access the data from this valuable household travel data resource. Length: Self-paced or up-to 2 days. Available: Now. For more information, contact Heather.contrino@fhwa.dot.gov.

Planning Data Technical Assistance Description: Tailored to customer requirements (length and topics), Resource Center specialists provide technical assistance on range of major Census data sources (including the American Community Survey), their current availability and future plans, and how they can be used for transportation planning. Length: Depends on customer requirements. Available: Now. For more information, contact ed.christopher@fhwa.dot.gov.

Federal-aid Financing – Highway Information and Apportionment Factors, Understanding Your State's Fair

Share Description: Annually each State is apportioned Federal-aid funds for the various programs authorized within that State. Such apportionments cannot be distributed without the appropriate data reported by the States. FHWA Division staff play an important role in ensuring that State-reported data is of apportionment quality. Learn how you can ensure that your State's data and resulting share of Federal-aid are correct and accurate. Length: 5 days. Available: Now. For more information, contact Ralph.Erickson@fhwa.dot.gov.

Financial Analysis System - Highways (FASH) Workshop

Description: Tailored to Federal, State and local finance data providers and users to demonstrate data entry and the submittal process. The tool is used by data providers for data quality initiatives for use by FHWA, Congress and the public. FASH is a data base management system that captures the overall financial status of a state's highway program. Length: 1.5 days. Available: Now. For more information, contact Carla.Mauney@fhwa.dot.gov.

Highway Information Seminar Description: Tailored to Federal, State, and local data providers and users to inform and discuss critical data issues including the reauthorized Federal-aid highway program, data quality, data quality initiatives, and software improvements. Data areas include HPMS, travel monitoring, motor fuel, highway finance, drivers' licenses, vehicle registrations, and NHTS. Length: 4 days. Available: Now. For more Information, contact marsha.reynolds@fhwa.dot.gov.

Highway Performance Monitoring System (HPMS)

Workshop Description: Discusses the latest issues in HPMS focusing on methods, procedures, and processes used for collection, coding, analyzing, and reporting annually highway-related data items. Each year, a new theme highlights the sessions chosen for that year's workshop. Previous workshops targeted data collection, partnering, and data quality, to name a few. Federal, State, and local applications and uses of HPMS data are also discussed. Audience is FHWA Division Planners, State HPMS Coordinators and Data Program Managers,

MPOs/local agencies, and consultants. Length: 2-3 days. Available: Annually - February/March. For more information, contact David.Winter@fhwa.dot.gov.

Highway Performance Monitoring System (HPMS) Software Workshop Description: Provide in depth technical training for the HPMS Software. This may be either hands-on training or through web conferencing. Topics include the HPMS submittal and review process using the HPMS Software as a tool. The intended audience is FHWA Division Planners, State HPMS coordinators, and MPOs. Length: 2-4 hours web conferencing or 1-2 days. Available: Now. For more information, contact Tom.Roff@fhwa.dot.gov.

HPMS: Understanding its Purpose and Place Description: Otherwise known as "HPMS 101," this session provides a basic overview of the HPMS program to those new to using highway system performance data at either the technical or management level. The requirements, needs, applications, structure, and quality assurance aspects of the HPMS will be discussed to provide an understanding of the program and to gain additional support and emphasis for quality data. Length: 4 hours to 1.5 days. Available: Now. For more information, contact David.Winter@fhwa.dot.gov.

Motor Fuel Workshops Description: Tailored to Federal, State, and local motor fuel data providers and users to inform and discuss critical issues in data accuracy and attribution. Length: 1.5 days. Available: TBA Location. For more information, contact Ralph.Erickson@fhwa.dot.gov.

Traffic Data for HPMS Reporting Description: Developed for FHWA Division person responsible for HPMS and Traffic and State DOT/MPO person(s) responsible for HPMS reporting and Traffic Monitoring. Session outlines the importance of improved traffic monitoring and to promote an interaction between the HPMS and traffic professionals. Length: ½ day web conferencing. Available: Now. For more information, contact Harshad.Desai@fhwa.dot.gov.

Traffic Monitoring Guide Training Course (NHI 151018)

Description: This NHI course provides an overview of the collection and application of traffic data including traffic volume, vehicle classification, and truck weight, and is available for state DOT, MPO, FHWA and consultant participants. The course will be held at 2-3 locations yet to be determined. Length: 2 days. Available: Now. For more information, go to www.nhi.fhwa.dot.gov or contact Harshad.Desai@fhwa.dot.gov.

Traffic Monitoring, An Introduction Description: Designed for those that are looking for a basic understanding of the various bits of information collected on highway traffic (i.e. traffic volume, vehicle classification, and truck weight). This

course can either be offered as a web cast or delivered in person and is available for Federal, State, and MPO participants. Length: ½ day. Available: Now. For more information, contact Harshad.Desai@fhwa.dot.gov.

Vehicle Travel Information System (VTRIS) and Traffic Volume Trends (TVT) Data, Understanding and Using Description: This course presents an overview and handson tutorial of using these systems to better understand and use traffic volume, vehicle classification, and truck weight data. The intended audience is State DOT traffic data providers, as well as FHWA Division contacts with oversight for traffic data. Length: ½-1 day. Available: Now. For more information, contact David.Jones@fhwa.dot.gov.

Environment

Section 4(f) Workshop Description: Provides an overview of section 4(f) focusing on the protection of parklands, recreation areas, wildlife and waterfrowl refuges and significant historic sites. Intended for those practitioners with some 4(f) experience. Length: ½ to 1 day. Available: Now. For more information, contact dave.gamble@fhwa.dot.gov, or katiann.wong-murillo@fhwa.dot.gov.

Section 7 Basic - Endangered Species Act Description: Provides an overview of the Endangered Species Act (ESA) and the procedures and responsibilities associated with the Act. Review terms, roles and key sections of the Act. Length: 2 days. Available: Now. For more information, contact kevin.moody@fhwa.dot.gov or brian.yanchik@fhwa.dot.gov.

Section 7 Advanced - Interagency Cooperation Description: Tailored to customer requirements, provides an advanced discussion on the Endangered Species Act (ESA), section 7—interagency cooperation. Topics include: ESA definitions, prohibited acts, biological assessments, biological opinions, incidental take statements. Length: 1 to 2 days. Available: Now. For more information, contact brian.yanchik@fhwa.dot.gov.

Section 106 Historic Preservation Workshop Description: Provides an introduction to the National Historic Preservation Act of 1966. Includes a step by step walk through of the Section 106 process when applied to Federal-aid projects. Suitable for staff involved in project development activities as well as planners and project engineers. Length: ½ day to 1 day. Available: Now. For more information, contact paul.tufts@fhwa.dot.gov, or stephanie.stoermer@fhwa.dot.gov.

Section 10/404 - Clean Water Act Description: Provides a basic overview of the U.S. Army Corps of Engineers permitting process, with a focus on compliance and permitting requirements under the Clean Water Act Section 404 and the Rivers and Harbors Act Section 10. Length: 1 to 2 days. Available: Now. For more information, contact brian.yanchik@fhwa.dot.gov.

American Indian Best Practices Description: Provides the basic understanding of the need for formal consultation with federally recognized American Indian tribes and how to approach consultation with the tribes. Reviews applicable regulations and executive orders, definition of terms, cultural differences to consider and best practices. Length: 1 day. Available: Now. For more information, contact paul.tufts@fhwa.dot.gov.

Beyond Compliance: Historic Preservation in Transportation Project Development (NHI 1420049) Description: This course is designed to help transportation professionals meet the new requirements of the Section 106 regulations and take advantage of the greater flexibility and autonomy offered by the recent revisions. The course focuses on the fundamentals of NEPA, Section 106, and Section 4(f) of the Department of Transportation Act, and provides techniques for coordinating transportation planning, project development and compliance with these three laws. The emphasis is on practical approaches for real-world situations and the importance of balancing stewardship and project delivery. Length: 3 days. Available: Now. For more information, go to www.nhi.fhwa.dot.gov or contact MaryAnn.Naber@fhwa.dot.gov.

Biological Assessments Description: Provides biological and regulatory discussions and tips on preparing a Biological Assessment under the Endangered Species Act. Length: 1 day. Available: Now. For more information, contact william.vanpeters@fhwa.dot.gov or brian.yanchik@fhwa.dot.gov.

Context Sensitive Solutions Course (NHI 142050)

Description: Context sensitive solutions (CSS) – also known as context sensitive design – is a collaborative, interdisciplinary approach to a transportation project that involves stakeholders in the development of a transportation facility that equally addresses safety, mobility, and the preservation of scenic, aesthetic, historic, and environmental resources and community values. Implementation of the CSS process will deliver benefits to an agency, for example, effective and timely decisions, gaining public trust and support, building positive relationships with resource agencies, delivering safe and financially feasible project solutions, and improving the overall project delivery process. This course will provide

participants with tools and techniques to effectively deliver timely and successful transportation projects. Length: 3 days. Available: Now. For more information, go to www.nhi.fhwa.dot.gov.

Context Sensitive Solutions Workshop Description:

Provides an overview of Context Sensitive Solutions (CSS) as a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves the scenic, aesthetic, historic and environmental resources while maintaining safety and mobility. Length: ½ day to 1 day. Available: Now. For more information, contact klynn.berry@fhwa.dot.gov.

Design and Implementation of Erosion and Sediment Control (NHI 134054A) Description: Provides an overview of the components of an erosion and sediment control plan, lists sources for the plan, identifies management practices and measures for typical situations, reviews typical construction and inspection problems and strategies and reviews federal and state regulations in this area. Length: 2 days. Available: Now. For more information, go to www.nhi.fhwa.dot.gov.

Functional Assessment of Wetlands (NHI 142018A)

Description: Provides an introduction to assessing wetlands impacts and mitigation planning based on hydrogeomorphic principles of wetlands analysis. Length: 4 days. Available: Now. For more information, go to www.nhi.fhwa.dot.gov.

Fundamentals and Abatement of Highway Traffic Noise (NHI 142007) Description: This course covers the requirements of 23 CFR Part 772, Procedures for Abatement of Highway Traffic Noise and Construction Noise, and the noise requirements of the National Environmental Policy Act of 1969. The course provides both technical and policy training. Length: 3 days. Available: FY2007. For more information, go to www.nhi.fhwa.dot.gov or contact mark.ferroni@fhwa.dot.gov.

Highway Traffic Noise Workshop Description: Provides a basic understanding of highway traffic noise, the FHWA noise regulations, and the noise abatement requirements for FHWA funded or approved transportation projects. Workshop can be tailored. Length: 1 to 2 days. Available: Now. For more information, contact maryann.rondinella@fhwa.dot.gov or stephanie.stoermer@fhwa.dot.gov.

Indirect and Cumulative Effects Analysis Workshop

Description: This workshop provides an overview of the requirements and methodologies used to analyze the indirect and cumulative effects of transportation projects. The workshop covers terminology, regulations and court

cases pertaining to these analyses. The workshop can be tailored to include local case studies. Length: 1 to 2 ½ days. Available: Now. For more information, contact lamar.smith@fhwa.dot.gov or <a href="mailto:mailto

National Environmental Policy Act (NEPA) Executive Briefing Description: Provides an overview of the FHWA project development process, emphasizing topics such as innovative mitigation and enhancement, significance, streamlining, reasonable alternatives, logical termini, purpose and need, interagency coordination and public involvement. Includes background on NEPA, the processing of environmental documents and a brief overview of the Section 4(f) regulation (if desired). Length: ½ day to 2 days. Available: Now. For more information, contact RC-Environment team.

NEPA and Transportation Decisionmaking (NHI 142005)

Description: This course considers FHWA's policies and procedures for applying the National Environmental Policy Act (NEPA) to the project development and decision-making processes related to transportation facilities. The course examines the evolution of environmental policy and the integration of social, environmental and economic factors into the framework of laws, regulations, policies, and guidance, which assist in achieving a decision on a transportation project that is in the best overall public interest. Length: 3 days. Available: Now. For more information, go to www.nhi.fhwa.dot.gov.

Soil Erosion/Sediment Control Description: Provides an overview of soil erosion and sediment processes, planning, site evaluations, laws and regulations. Length: 1 to 2 days. Available: Now. For more information, contact brian.smith@fhwa.dot.gov or daye.sullivan@fhwa.dot.gov.

Wetland Delineation Description: Provides a basic overview on the application of the 1987 Wetland Delineation Manual in use by the Army Corps of Engineers. Length: 3 to 5 days. Available: Now. For more information, contact brian.smith@fhwa.dot.gov or william.vanpeters@fhwa.dot.gov.

Environmental Justice

Fundamentals of Environmental Justice (NH 142042I)

Description: Provides an overview of Title VI and Executive Order 12898 requirements and a framework for using a variety of approaches and tools for accomplishing environmental justice goals with transportation objectives. Length: 2 days. Available: Now. For more information, go to www.nbi.fhwa.dot.gov.

Environmental Justice for MPOs Seminar

Description: Tailored to audience requirements (length and topics), provides an overview of Title VI and Executive Order 12898 requirements and environmental justice objectives with particular focus on MPO issues and analytical approaches to assess compliance in metropolitan plans and programs. Length: 2-8 hours. Available: Now. For more information, contact brian.betlyon@fhwa.dot.gov.

Environmental Justice and Project Development

Description: Tailored to audience requirements (length and topics), provides an overview of Title VI and Executive Order 12898 requirements and environmental justice objectives with particular focus on NEPA and the transportation decision-making process. Length: ½ day to 1.5 days. Available: Now. For more information, contact klynn.berry@fhwa.dot.gov, or katiann.wongmurillo@fhwa.dot.gov.

Environmental Justice/Title VI Technical Assistance

Description: Tailored to customer requirements (length and topics), Resource Center specialists provide technical assistance related to EJ/Title VI issues and the transportation planning process. Length: Depends on customer needs. Available: Now. For more information, contact brian.betlyon@fwha.dot.gov or Jocelyn.jones@fhwa.dot.gov.

Financial Planning / Fiscal Constraint

Financial Planning in Transportation (NTI)

Description: Provides an overview of financial planning in support of the development of transportation plans and programs as well as information on the process and the types of analyses associated with developing forecasts over the planning horizons. Length: 3 days. Available: Now. For more information, go to www.ntionline.com.

Highway Program Financing (NHI - 231013)

Description: This course covers the various aspects of Federal-aid highway financing unique to the FHWA program. Length: 2 days. Available: Now. For more information, go to www.nhi.ftwa.dot.gov.

Specialized Innovative Finance Workshops/Seminars

Description: Several workshops and seminars, of varying lengths, are available from the Resource Center's Air Finance Team focusing on a review of traditional transportation funding sources and discussions of TIFIA, GARVEES, RVEES, public-private partnerships, etc. Length: Varies. Available: Now. For more information, contact Resource Center Finance team.

Freight Planning

Engaging the Private Sector in Freight Planning

Description: Reviews strategies and techniques to initiate private-public sector cooperation, identifies key private sector stakeholders, and suggests ways to improve communication. Successful approaches employed at several State departments of transportation (DOTs) and Metropolitan Planning Organizations (MPOs) are also discussed. Length: 1 day. Available: Now. For more information, contact jocelyn.jones@fhwa.dot.gov

Engaging the Private Sector in Freight Planning, Exec Summary

Description: In a summary format, provides tools and techniques to develop and sustain relationships, either formally or informally, with key private sector freight stakeholders. Generally delivered through a webcast session. Length: 1-2 hours. Available: Now. For more information, contact Jocelyn.jones@fhwa.dot.gov.

Freight Security Awareness Web-Based Primer

Description: Self-paced computer product that provides an overview of security initiatives and focuses on how transportation agencies can incorporate security-related issues and programs within their traditional, day-to-day transportation planning activities. This is a prerequisite to a complementary freight security awareness workshop that will become available later in 2006. Length: Self-paced 1 to 2 hours. Available: Summer 2006. For more information, contact crystal.jones@fhwa.dot.gov or fawn.thompson@fhwa.dot.gov.

Freight Planning Technical Assistance Description: Tailored to customer requirements (length and topics), Resource Center specialists provide freight planning technical assistance on a range of issues, including freight studies, private sector involvement, and data and forecasting. Length: Depends on customer needs. Available: Now. For more information, contact fawn.thompson@fhwa.dot.gov and jocelyn.jones@fhwa.dot.gov

Integrating Freight in the Transportation Planning Process (NHI 139001) Description: Provides an overview of freight transportation, its stakeholders, and its issues so that public sector transportation planners will be better able to incorporate freight into their respective transportation planning processes and programs. Length: 2 days. Available: Now. For more information, go to www.nhi.fhwa.dot.gov.

Integrating Freight in the Transportation Planning Process, Exec Summary Description: Provides a brief overview of freight transportation, its stakeholders, and its issues. Can be tailored and targeted for State DOT executives and MPO Board members. Generally delivered through webcast session. Length: 1-2 hours.

Available: Now. For more information, contact fawn.thompson@fhwa.dot.gov or jocelyn.jones@fhwa.dot.gov.

Transportation Planning for the Private Sector Presentation

Description: State DOTs and MPOs can use this presentation to explain the public sector transportation planning process to private sector stakeholders and to encourage collaboration. Length: Up to 2 hours. Available: Summer 2006. For more information, contact jocelyn.jones@fhwa.dot.gov.

Uses of Multimodal Freight Forecasting in Transportation Planning (NHI 139002) Description: Provides an overview of freight forecasting and the techniques for forecasting freight at the metropolitan and state levels, examines the factors that influence economic growth and distribution of freight traffic, and reviews notable practices. Length: 3 days. Available: Now. For more information, go to www.nhi.fhwa.dot.gov.

Upcoming New Freight Courses/Workshops and Technical Assistance Offerings Description: Several new freight workshops and courses are under development and many of these may be available for delivery in FY07. These include the following new workshops: Freight Data Made Simple; Freight Security Awareness Workshop; and a Multimodal Freight Financing Guidebook and Seminar. In addition, the following freight courses are under development through NHI: Advanced Freight Planning (NHI 139003); Freight Planning and Environmental Considerations (NHI 139005); and Principles of Effective Commercial Motor Vehicle Size and Weight Enforcement (NHI 139004). Length: Varies by workshop or course. Available: Varving Dates in FY07. For specific information on the content and projected timelines for any of these new freight offerings, please check the Office of Freight Management and Operations' website at ops.fhwa.dot.gov/freight or contact carol.keenan@fhwa.dot.gov.

GIS and Planning/GIS and Environment

Applying Spatial Data Technologies to Transportation (NHI - 151039) Description: Provides an overview of transportation applications that can use today's major spatial data technologies and trains participants on how to implement these applications from a planning perspective. Length: 2 days. Available: Now. For more information, go to www.nhi.fhwa.dot.gov.

GIS and Transportation Planning Technical Assistance

Description: Tailored to audience requirements (topics and length), Resource Center specialists provide technical assistance on spatial data technologies and how these can

be used to enhance transportation planning. Length: Depends on customer requirements. Available: Now. For more information, contact ben.williams@fhwa.dot.gov or brian.betlyon@fhwa.dot.gov.

Transportation Planning Applications of Google Earth

Description: Tailored to audience requirements (topics and length). Provides technical assistance on using Google Earth for transportation planning. Length: Depends on customer requirements. Available: Now. For more information, contact lindsay.banks@fhwa.dot.gov or mark.sarmiento@fhwa.dot.gov.

Use of GIS within Environmental Streamlining and Stewardship Description: Tailored to audience requirements (topics and length), provides a general overview of spatial data technologies and how these can be used to enhance environmental decision-making and streamlining. Length: 2 hours to 1.5 days. Available: Now. For more information, contact ben.williams@fhwa.dot.gov.

Land Use and Transportation

Forecasting Land Use Activity Seminar Description: Offered through the Travel Model Improvement Program, explains and demonstrates methods and data sources for forecasting the nature and amount of land using activities, specifically, population, dwelling units, basic employment and services employment. Length: 1 day. Available: Now. For more information, go to tmtostate through the activities and the services employment. Length: 1 day. Available: Now. For more information, go to tmtostate through the services employment. Length: 1 day. Available: Now.

Land Use and Transportation Course Description: Provides an overview of transportation and land use planning and how they can and should interact. The course trains participants to actively participate in the development of transportation systems that support desired land uses, as well as help shape land uses that support the transportation system. Length: 3 days. Available: Under Development (pilot Fall 2006). For more information, contact jody.mccullough@dot.gov.

Land Use and Transportation Planning Seminar

Description: Provides an overview of key issues related to the interaction of transportation planning and land use and the integration of transportation plans with local and state land use plans, with focus on innovative techniques, approaches and applications. Length: 6 hours. Available: Now. For more information, contact jim.thorne@fhwa.dot.gov or HEPP-TPCB.

Land Use and Transportation Planning Technical

Assistance Description: Tailored to audience requirements (topics and length), Resource Center specialists provide technical assistance on land use issues as they relate to

transportation planning, including sub-topics such as: transportation characteristics of land use patterns, agency roles and responsibilities, and developing land use and transportation plans. Length: Depends on customer requirements. Available: Now. For more information, contact jim.thorne@fhwa.dot.gov or ed.christopher@fhwa.dot.gov.

Linking Planning and NEPA

Linking Planning and NEPA Executive Seminar (NHI 151041) Description: Aimed at upper level managers and directors with responsibilities for transportation planning, environmental analyses, and/or project development working in both planning and resource agencies. Examines the planning and NEPA processes from policy and management perspectives and facilitates dialogue on the need for and benefits of changing the circumstances under which the planning and NEPA processes are conducted. Conducted prior to offering of management level course. Length: 4 hours. Available: Now. For more information, contact robert.ritter@fhwa.dot.gov or go to www.nhi.fhwa.dot.gov.

Linking Planning and NEPA Managers Workshop (NHI 151041) Description: Aimed at planners and NEPA practitioners working in both planning and resource agencies. Examines the planning and NEPA processes from policy and management perspectives and facilitates dialogue on the need for and benefits of changing the circumstances under which the planning and NEPA processes are conducted. Conducted several weeks after the Executive Seminar. Length: 3 days. Available: Now. For more information, contact robert.ritter@fhwa.dot.gov or go to www.nhi.fhwa.dot.gov.

Linking Planning and NEPA Seminar Description: A half-day variant of the Linking Planning & NEPA workshops that presents the concepts and case studies. This Seminar is designed to instruct participants on the concepts of Linking Planning and NEPA. It is open to everyone. Length: 4 hours. Available: Under development. For more information, contact Robert.ritter@dot.gov.

Performance Measures

Performance Measures for Transportation Planning Technical Assistance Description: Tailored to audience requirements (topics and length), RC specialists provides technical assistance on performance measures that can be used to track and measure transportation system performance, congestion management and other planning objectives. Length: Based on customer requirements.

Available: Now. For more information, contact brian.betlyon@fhwa.dot.gov.

Planning Fundamentals

Administration of FHWA Planning Grants (NHI-151021)

Description: Provides an overview of the responsibilities and relationships among Federal, State, and local agencies involved in administration of FHWA planning grants to States and State subgrants to Metropolitan Planning Organizations (MPOs) and local governments. Length: 1.5 days. Available: Now. For more information, go to www.nhi.fhwa.dot.gov.

Introduction to Metropolitan Transportation Planning (NHI/NTI – 152069) Description: Provides a general introduction and overview of the metropolitan transportation planning process, including basic concepts, products, and federal requirements. Length: 3 days. Available: Now. For more information, go to www.ntionline.com.

Metropolitan Planning 101 Seminar Description: Tailored to audience requirements (topics and length), provides an overview of the basic concepts, components, and participants in the metropolitan planning process. Also highlights innovative and noteworthy practices. Length: 4-8 hours. Available: Now. For more information, contact brian.betlyon@fhwa.dot.gov.

Introduction to Statewide Transportation Planning (NHI/NTI-151038) Description: Provides an overview of the statewide transportation planning process including tools, methods and best practices. Length: 2 days. Available: Now. For more information, go to www.ntionline.com.

Statewide and Metropolitan Programming (NTI)

Description: Provides an overview of the basic concepts, components, and participants in the transportation programming process. Length: 3 days. Available: Now. For more information, go to www.ntionline.com.

Overview of Metropolitan Planning for MPO Board Members Description: Targeted for MPO Board members, provides an overview of the basic concepts, components, and participants in the metropolitan planning process. Length: 90 minutes. Available: Now. For more information, contact HEP- TPCB or sherry.ways@fhwa.dot.gov.

General Planning Technical Assistance

Description: Planning technical assistance in general metropolitan and statewide planning issues as well as

planning specialty areas is available to Division Offices and their partner agencies. This will be tailored and targeted to the specific request. Length: Based on customer requirements. Available: Now. For more information, contact Resource Center-Planning Team – lisa.randall@fhwa.dot.gov.

Planning and Operations

Executive Session on Advancing Regional Transportation Systems Management and Operations

Description: Provides an executive level overview to raise awareness of transportation managers and decision-makers on the need for improved levels of regional transportation operations planning and collaboration activities. Length: 1-2 hours. Available: Now. For more information, contact wayne.berman@fwha.dot.gov.

Advancing Regional Transportation Systems Management and Operations (NHI 133098) Description: This NHI course covers important institutional aspects necessary for advancing transportation system management and operations in a regional context, including: (1) regional transportation operations collaboration and coordination activities; (2) enhanced levels of operations considerations in the regional transportation planning process; and (3) improved linkage opportunities between planning and operations. Length: 1 day. Available: Now. For more information, go to www.nhi.fhwa.dot.gov.

Regional ITS Architecture: Planning Perspective

Description: Provides an overview of the requirements for the establishment and maintenance of Regional ITS Architectures, the role of MPOs, and the links to the planning process. Length: 2-4 hours. Available: Now. For more information, contact ben.Williams@fhwa.dot.gov.

ITS Deployment Analysis System (NHI 137041)

Description: This updated course is a hands-on computer training session on the ITS Deployment Analysis System (IDAS) software. IDAS is a sketch-planning analysis tool that transportation practitioners can use to estimate the benefits and costs of ITS and operations investments. IDAS offers the capability for a systematic assessment of ITS and operational improvements with a single analysis tool, and can predict relative costs and benefits for more than 60 types of ITS and operations investments. Length: 2 days. Available: Spring 2007. For more information, go to www.nhi.dot.gov or contact robin.mayhew@fhwa.dot.gov.

Planning Oversight and Stewardship

Planning Oversight and Stewardship Program Assistance

Description: Planning program area assistance is available to Division Offices in scoping and/or conducting reviews associated with stewardship and oversight of metropolitan and statewide transportation planning processes/programs (e.g., Transportation Management Area certification reviews, Statewide planning process/program reviews, or other associated process/program reviews). Length: As deemed necessary. Available: Now. For more information, contact larry.anderson@fhwa.dot.gov,

Public Involvement

Public Involvement in Transportation Decision-Making (NHI/NTI - 142036) Description: Provides an in-depth review of the various components of public involvement in transportation decision-making, as well as specific skills, techniques and approaches for enhancing public interaction. Length: 3 days. Available: Now. For more information, go to www.nhi.dot.gov and www.ntionline.com

Public Involvement Workshop (RC) Description: Provides an overview of the importance of public involvement and reviews multiple public involvement techniques. Addresses public's procedural, psychological and substantive needs with a focus on communication styles and barriers to participation. Length: 2 days. Available: Now. For more information, contact klynn.berry@fhwa.dot.gov.

Scenario Planning

Scenario Planning Technical Assistance

Description: Tailored to customer requirements (length and topics), Resource Center specialists provide technical assistance on scenario planning, including an overview of scenario planning and how it provides a framework for developing a shared vision for the future by analyzing various forces (e.g., health, transportation, economic, environmental, land use, etc.) that affect growth. Reviews how different software packages can be used to test various future alternatives that meet state and community needs. Length: Depends on customer needs. Available: Now. For more information, contact brian.betlyon@fhwa.dot.gov or jim.thorne@fhwa.dot.gov

Scenario Planning Workshop: Description: Scenario planning is a process in which transportation professionals and citizens work together to analyze and shape the long-term future of their communities. Using a variety of tools and techniques, participants in scenario planning assess trends in key factors such as transportation and congestion, land

use, safety, demographics, health, economic development, and the environment. Workshop presenters include Peers who provide participants with an overview of the scenario planning process and share examples of scenario planning efforts. Headquarters and the Resource Center provide an overview of current methods and tools, and information about practices around the country. Length: Varies. Available: Now. For more information, contact jody.mccullough@dot.gov or brian.betlyon@fhwa.dot.gov.

Transportation Safety Planning

Transportation Safety Planning – (NHI/NTI 151042)

Description: Provides an overview on how to routinely integrate safety as a key-planning factor, including the development of safety elements in long-range plans, safety as a factor in Transportation Improvement Programs (TIPs), and sponsoring community-based safety education programs. Length: 2 days. Available: Now. For more information, go to www.nhi.dot.gov or www.ntionline.com or contact sherry.ways@fhwa.dot.gov.

Safety Conscious/Transportation Safety Planning Forums

Description: FHWA facilitated forums where stakeholder groups involved in addressing safety are brought together for a conference to "jump start" the SCP process by initiating a dialogue, reviewing current planning processes and activities, identifying challenges, opportunities and resource requirements and creating an action plan. Length: 1-2 days. Available: Now. For more information, contact sherry.ways@fhwa.dot.gov.

Safety Conscious/Transportation Safety Planning Seminar

Description: Tailored to audience requirements (topics and length), provides an overview of innovative techniques and approaches for successfully integrating safety in the transportation planning process. Length: 2-8 hours. Available: Now. For more information, contact iim.thorne@fhwa.dot.gov.

Safety Conscious/Transportation Safety Planning Technical Assistance Description: Tailored to audience requirements (topics and length), Resource Center specialists provide technical assistance on transportation safety planning and lead interactive discussions with state, MPO and Division staff based on an area's needs. Length: Depends on customer requirements. Available: Now. For more information, contact jim.thorne@fhwa.dot.gov.

Travel Demand Forecasting

Introduction to Urban Travel Demand Forecasting (NHI - 152054) Description: Provides an overview of the traditional

four-step planning process of trip generation, trip distribution, mode choice and traffic assignment. Also reviews the development of land use forecasts, network and zone structures and use of Geographic Information Systems. Length: 4 days. Available: Now. For more information, go to www.nhi.fhwa.dot.gov and tmip.fhwa.dot.gov.

Multimodal Travel Forecasting (NTI) Description: Provides an overview of multimodal travel forecasting, techniques and approaches. Reviews available data and procedures. Length: 3 days. Available: Now. For more information, go to www.ntionline.com.

Travel Demand Forecasting Seminar Description: Tailored to audience requirements (topics and length), provides a general overview of travel demand forecasting, especially the traditional four-step model. Reviews the uses and applications of forecasts for planning purposes and highlights noteworthy practices and techniques. Length: 1 day. Available: Now. For more information, contact brian.betlyon@fhwa.dot.gov or eric.pihl@fhwa.dot.gov.

Travel Demand Forecasting Technical Assistance:

Description: Tailored to customer requirements (length and topics), Resource Center specialists provide a wide variety of technical assistance related to travel demand forecasting and planning analysis, including topics such as: model calibration, data sources and collection, analysis methods, land use forecasting, activity based models and the traditional 4-step process . Technical assistance can include reviews of corridor studies, Environmental Impact Statements, etc. Length: Depends on customer needs. Available: Now. For more information, contact supin.yoder@fhwa.dot.gov, or eric.pihl@fhwa.dot.gov or brian.betlyon@fhwa.dot.gov or jim.thorne@fhwa.dot.gov.

Model Validation and Reasonableness Checking Seminar

Description: Offered through the Travel Model Improvement Program, explains and demonstrates the process for estimating, calibrating and validating regional travel forecast models with base year data. Length: 1 day. Available: Now. For more information, go to tmip.fhwa.dot.gov.

Statewide Travel Forecasting Workshop Description: Provides State DOT, MPO, and other transportation planning practitioners an overview of statewide travel demand forecasting models, how these models are used to analyze transportation issues and policies at the State level and the interaction with MPO travel demand models. This workshop also provides information and insight to State DOTs that are considering the development or revision of these models. Length: 1 day. Available: Summer 2006.

For more information, contact supin.yoder@fhwa.dot.gov or eric.pihl@fhwa.dot.gov.

Tribal Transportation Planning and Historic Preservation

Tribal Transportation Planning and Historic Preservation
Technical Assistance Description: Tribal technical assistance
related to Tribal consultation requirements and notable practice
is available at both the transportation planning- and projectlevels. Specific areas include statewide and metropolitan
transportation planning and programming and historic
preservation related to Section 106 of the National Historic
Preservation Act. In addition to technical assistance,
PowerPoint presentation and other resource materials are also
available. For more information, contact
robin.mayhew@fhwa.dot.gov, kenneth.petty@fhwa.dot.gov,
MaryAnn.Naber@fhwa.dot.gov
grawn.thompson@fhwa.dot.gov.

Peer Exchanges

Peer Exchange are available through the following programs: Travel Model Improvement Program (TMIP), Freight, HPMS, and Other Planning Areas (through the Transportation Planning Capacity Building Program). The Peer Exchange provides transportation agencies a forum to share ideas and noteworthy practices not only to strengthen transportation planning practices, but also to build relationships and reinforce cooperation between agencies.

Freight Peer-to-Peer Program Description: Builds on the existing Freight Planning Peer Exchange LISTSERV (http://www.fhwa.dot.gov/freightplanning/) by placing practitioners and experts in contact with one another to tackle specific issues. This next phase will include a new database containing resumes of freight experts, travel resources to facilitate face-to-face meetings, and management support to help organize and facilitate fruitful sessions. Length: Varies. Available: Fall 2005. For more information, contact FHWA Office of Freight Management and Operations.

HPMS and Highway Inventory Data Peer-to-Peer Program

Description: Provides a forum for the exchange of expertise and experiences from practitioners and experts on these subjects and specific issues. Highway inventory and other databases that traditionally support HPMS, including relationships, integration, and quality assurance issues will be the focus of these sessions. Other topics may include building effective partnerships, sharing resources for data collection, and management support. Travel resources to facilitate face-to-face meetings and support to help organize

and facilitate meaningful sessions may be available. Length: Varies. Available: Now. For more information, contact Fred.Orloski@fhwa.dot.gov.

Transportation Planning Capacity Building Peer Program Description: Designed to bring together practitioners from a variety of experiences and levels of expertise in a spirit of partnership and teamwork. This program can be viewed on the web at www.planning.dot.gov. The website contains information on how to apply as well as a summary of prior Peer Exchange activities. Length: varies. Available: Now. For more information, contact www.planning.dot.gov or contact sherry.ways@fhwa.dot.gov.

TMIP Peer Review Program and TMIP Technical Roundtables

The Travel Model Improvement Program (TMIP) offers a peer review program focused on forecasting and data collection procedures to assist with model development and improvement efforts. TMIP supports peer reviews by funding travel, lodging and per diem for site visit(s) by peer review panel members. TMIP can also assist in the selection of peer review panel members and can help document the review, if requested, by the sponsoring agency. TMIP also periodically holds forums where experts in a particular area share ideas and discuss an emerging technical issue. Discussion results are disseminated via the TMIP website. Length: Varies. Available: Now. For more information, go to tmip.fhwa.dot.gov or contact brian.gardner@fhwa.dot.gov, supin.yoder@fhwa.dot.gov or eric.pihl@fhwa.dot.gov.